

## DIAGNOSES

### Specierum novarum

in herbario Horti Regii Botanici Edinburgensis cognitarum.

CCCLI-CCCC.

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***Anaphalis rhododactyla*, W. W. Sm. Sp. nov.**

Species ex affinitate *A. chlamydophyllae*, Diels et *A. cuneifoliae*, Hook. f. et *A. yunnanensis*, Franch. a quibus involucri phyllis laete roseis inter alia dignoscitur.

Planta dense caespitosa, 10–20 cm. alta, e caudice lignoso multicipite foliis emarcidis dense induto oriens. Caules plures flexuosi erecti foliis basalibus et caulinis fere ex toto celati, longiuscule albo-araneoso-tomentosi. Folia radicalia numerosissima, rosulam formantia, ad 5 cm. longa, 5–9 mm. lata, spathulata vel lineari-spathulata vel lineari-oblonga, apice rotundata vel obtusissima, basi in petiolum haud discretum latum subscariosum attenuata, in sicco submembranacea, utrinque concoloria et albo-araneoso-tomentosa; folia caulina radicalibus subsimilia plerumque lineari-oblonga, erecta et caulem plus minusque celantia, haud petiolata; folia suprema inflorescentiam congestam quasi-involucrantia, apice saepe longiuscule apiculata. Inflorescentia subglobosa 2–3 cm. diametro capitulis 20–30 arcte compactis composita; pedunculi 3–5 mm. longi dense araneoso-tomentosi; capitula 7–8 mm. diametro; involucri phylla lanceolata vel ovato-lanceolata, acuta, circ. 8 mm. longa, basi viridia ibique extra plus minusve tomentosa, supra scariosa glabra pulcherrime roseotincta; flores circ. 5 mm. longi pappo albido 5–6 mm. longo praediti; achaenia immatura circ. 1 mm. longa complanata glabra.

"China:—Mountains of the Chungtien plateau, Yunnan. Lat. 27° 30' N. Alt. 12,000 ft. Plant of 4-8 inches. Phyllaries bright rose. Open stony pasture. July 1914." G. Forrest. No. 12,628.

This is a remarkably beautiful species.

**Asystasia silvicola**, W. W. Sm. Sp. nov.

Species *A. lanceolatae*, T. Anders. affinis a qua foliis saepius oblanceolatis longius petiolatis, calyce glanduloso-hirsutulo, corollae albae parte cylindra partem ampliata subaequante, ovario glabro e descriptione divergit.

Planta 60-120 cm, alta erecta caulibus gracilibus parce ramosis teretibus glabris internodiis elongatis. Folia petiolo 1-2.5 cm. longo praedita; lamina plerumque 10-16 cm. longa, 3-4 cm. lata, oblanceolata vel lanceolata, apice longiuscule acuminata, basi anguste cuneata, margine integra paululo undulata, membranacea, utrinque glabra, nervis 6-7 paribus subconspicuis. Inflorescentiae ramulos terminantes circ. 3 cm. longae spiciformes; bractee 5-10 mm. longae lanceolatae vel lineares glanduloso-hirsutulae. Calycis circ. 1 cm. longi segmenta linearia vel lineari-lanceolata glanduloso-hirsutula. Corolla alba circ. 2.5 cm. longa extra villosula; tubi pars cylindrica circ. 1 cm. longa intus albo-villosula, pars superior subabrupte ampliata circ. 1 cm. longa; lobi inaequales suberecti. Stamina 4 subaequalia filamentis glabris, antheris albidis uno latere minute pilosulis basi apiculo gracili instructis. Ovarium glabrum stylo sparsim albo-pilosulo. Fructus circ. 1.2 cm. longus glaber seminibus 4 complanatis margine subalatis glabris.

"China:—Yunnan, Szemao, forests to south at 4000 ft.; shrubby, 2 ft. high, white flowers." A. Henry. No. 12,934.

"Yunnan, Szemao, East Mountains at 4500 ft.; shrubby, 4 ft. high." A. Henry. No. 11,600A.

**Chirita chlamydata**, W. W. Sm. Sp. nov.

Species ex affinitate *C. urticaefoliae*, Ham. a qua calyce ad imum in lobos lineari-oblongos fisso inter alia signa recognoscitur.

Planta ut videtur 30-60 cm. alta. Caulis erectus pilis longis articulatis densissime et molliter indutus. Folia opposita subaequalia petiolo 2-5 cm. longo densissime piloso suffulta; lamina 10-20 cm. longa, 5-8 cm. lata, ovata vel ovato-lanceolata vel subelliptica, saepe asymmetrica, apice longiuscule acuminata, basi late cuneata vel subrotundata, margine regulariter crenato-serrata et pilis articulatis dense ciliata, in sicco papyracea, supra atroviridis pilis adpressis densissime induta,

infra subincana laxiuscule pilosa vel subsetulosa, costa nervisque circ. 10 paribus subtus paulo eminentibus, utrinque in sicco subconspicuis. Inflorescentiae 3-5-florae; pedunculus circ. 10 cm. longus molliter et dense pilosus; pedicelli similiter induti, 5-10 mm. longi; bractee 2.5-3.5 cm. longae, foliaceae, ovatae, calyces floresque inapertos plus minusve amplectantes, pilosae. Flores 5-5.5 cm. longi lilacini vel purpurei. Calyx 1.3-1.5 cm. longus, fere ad imum in lobos lineari-oblongos obtusos extra pilosos intus glabros fissus. Corollae bilabatae anguste tubulosae tubus circ. 4.5-5 cm. longus, supra leniter ampliatus ad 1.5 cm. latus (in sicco), extra setulis articulatis densiuscule conspersus, intus glaber; lobi rotundati. Stamina perfecta duo inclusa in medium tubum inserta filamentis glabris. Ovarium cum stylo circ. 4 cm. longum dense albido-pilosum; stigma oblique expansum bilobulum. Capsula linearis 7-8 cm. longa.

China:—Yunnan, south of Red River from Manmei, 6000 ft.; Henry No. 9188A in Herb. Kew. et Edin.; at Feng-Chen Lin mountain forests, 7000 ft.; flowers purplish (?). Henry No. 9188B in Herb. Kew. et Edin.; Mengtze, 6000 ft., in ravine; Henry No. 9413B in Herb. Kew. et Edin.; Mengtze, in forests, 5500 ft., lilac flowers. Henry No. 9413A.

**Chirita Dalzielii**, W. W. Sm. Sp. nov.

Species affinis *C. sinensi*, Lindl. a qua foliis longe petiolatis, corymbis 1-5-floris, calycis segmentis linearibus hirsutis inter alia differt; a *C. Juliae*, Hance foliis majoribus, lamina haud in petiolum attenuata sed abrupte separata, pedunculis pedicellisque longioribus, corollae forma recedit.

Planta acaulis. Folia 8-12 rosulam formantia, petiolis plerumque 3-8 cm. longis setis patentibus longis articulatis fulvis dense indutis; lamina majorum ad 15 cm. longa, ad 7 cm. lata, minorum circ. 6 cm. longa, circ. 3 cm. lata, plus minusve elliptica vel rarius ovata vel ovato-oblonga, apice obtusa, basi plus minusve rotundata vel raro asymmetricice cordatula, margine regulariter crenato-serrata, in sicco papyracea, supra setulis dense et scabridule induta et setis longis articulatis fulvis sparsis vel numerosis ad margines numerosioribus praedita, infra praesertim ad costam eminentem nervosque 6-8 paria dense et longiuscule fulvo-setosa. Inflorescentiae 1-5-florae; pedunculus 6-10 cm. longus, ascendens, dense et longiuscule fulvo-setosus; pedicelli similiter induti 1.5-2 cm. longi; bractee 2-3 mm. longae, lineares vel lineari-oblongae, longe setosae. Flores 3-4 cm. longi, purpurei, intensius reticulato-venosi. Sepala 4-5 mm. longa, lineari-lanceolata, acuminata, fulvo-setosa. Corollae bilabatae tubus circ. 2.5 cm. longus,

basi 5 mm. latus, mox ad 2 cm. ore amplius (in sicco complanatus), extra setulis articulatis conspersus intus glaber; lobi rotundati saepe apiculati 7-8 mm. diametro utrinque setosuli. Stamina perfecta duo inclusa. Stylus ad stamina attingens, cum ovario densissime pilosus, stigmatibus obliquo obscure bilobulo. Fructus deest.

"China:—Thai-yong, a mountain valley, 2000 ft. elevation, sixty miles west of the port of Swatow, surrounded by hills reaching 1000 ft. and intersected by glens richly wooded. Sept. 1898." J. M. Dalziel. No. 184.

**Chirita umbricola**, W. W. Sm. Sp. nov.

Species valde affinis *C. brevipedis*, Clarke a qua calycis lobis brevibus triangularibus, corollae tubo brevi pro latitudine inter alia recedit.

Planta acaulis vel fere acaulis. Folia pauca, plerumque 1-2, petiolo 4-6 cm. longo setulis articulatis fulvis vel ferrugineis densissime obsito suffulta; lamina plerumque 8-16 cm. longa, 4-8 cm. lata, plus minusve elliptica, apice obtusa vel obtusiuscula, basi oblique rotundata vel late cuneata, margine irregulariter crenato-serrata setulis articulatis setulosa, in sicco membranacea, supra atroviridis, setulis haud articulatis plus minusve dense instructa, subtus pallidior laxiuscule setulosa, ad costam nervosque 5-7 paria conspicuos paulo densius setulosa. Inflorescentiae 1-5-florae; pedunculus 6-10 cm. longus, ascendens, setulis articulatis ferrugineis dense obsitus; pedicelli similiter induti 1-1.5 cm. longi; bractee circ. 3 mm. longae lineari-oblongae, obtusiusculae, ferrugineo-setosulae. Flores 3-3.5 cm. longi, coerulei vel violacei vel albi. Calyx circ. 1.2 cm. longus, tubulosus, ad tertiam partem in lobos triangulares acutos fissus, extra sparsim setulosus. Corollae bilabiatae tubus 2.5 cm. longus vel paulo longior, basi lato ad os (1.6 cm. latum in sicco complanatum) amplius, extra setulis articulatis hic illic conspersus, intus glaber; lobi rotundati circ. 1 cm. diametro. Stamina perfecta duo inclusa filamentis tantum 7-8 mm. longis dense pilosis; staminodia duo. Ovarium cum stylo circ. 1.8 cm. longum pilis articulatis minutis dense obsitum; stigma oblique bilobulum. Fructus deest.

"Upper Burma:—Ridge of Naung-chaung, Nwai divide; 6000-8000 ft.; flowers violet blue or white, on wet rocks of shady gullies or by streams in forest. July 1914." F. K. Ward. No. 1824.

**Chrysanthemum jugorum**, W. W. Sm. Sp. nov.

Species valde affinis *Chrysanthemo Atkinsoni*, C. B. Clarke a quo habitu minore, caudice multicipite, foliis minoribus, involucri phyllis longiuscule albido-pilosis inter alia recedit.

Planta perennis plerumque 15-20 cm. alta; caudicis multicipitis rami arcte in glebam congesti, foliorum delapsorum vaginis emarcidis dense induti; radix crassa. Caules erecti rigidiusculi bene foliati, dense et longiuscule albo-pilosi. Folia radicalia numerosa, petiolo 2-3 cm. longo albo-piloso in vaginam latam stramineam glabram vel pilosam ampliata praedita; lamina plerumque 3-4 cm. longa, 1-1.5 cm. lata, ambitu oblonga, bipinnatisecta, segmentis ultimis 3-4 mm. longis linearibus acutis longe mucronatis sparsim sed longiuscule albido-pilosis; caulina radicalibus subsimilia, vix petiolata, cauli subadpressa, densius albido-pilosa. Capitula solitaria 2-2.5 cm. diametro; involucri phylla 5-8 mm. longa, numerosa, oblonga vel lineari-oblonga, acuta vel obtusiuscula, longiuscule albido-pilosa, medio viridia vel flavido-viridia, margine purpureo-scariosa; flores ligulati circ. 1.2 cm. longi recurvati flavi; flores disci circ. 4 mm. longi acheniis complanatis glabris, pappo nullo. Achaenia matura desunt.

"China:—Yunnan, on the Bei-ma-Shan, Mekong-Yangtze divide. Lat. 28° 20' N. Alt. 14,000 ft. Stony moist pasture. Plant of 3-9 inches. Ray florets deep orange, disc florets orange and olive-green. Sept. 1914." G. Forrest. No. 13,354.

This new species is a close ally of the East Himalayan *Chrysanthemum Atkinsoni*, C. B. Clarke.

**Var. tanacetopsis**, W. W. Sm. Var. nov.

Haec planta varietas eradiata praecedentis esse videtur. Caules numerosi e caudice longo lignoso ascendente vaginis emarcidis induto orientes ad 35 cm. alti longiuscule sed vix dense albo-pilosi. Folia radicalia numerosa ad 8 cm. longa, bipinnatisecta ut in typo, sparsim albido-pilosa vel etiam subglabrescentia; caulina radicalibus subsimilia, epetiolata, subpatentia. Capitula solitaria circ. 2 cm. diametro; involucri phylla ut in typo sed minus pilosa; flores ligulati nulli.

"China:—Yunnan, on the Kari pass, Mekong-Yangtze divide. Lat. 27° 40' N. Alt. 13,000-14,000 ft. Open moist stony pasture. Plant of 9-14 inches. Flowers deep orange. July 1914." G. Forrest. No. 12,897.

This plant bears a strong resemblance to *Tanacetum Delavayi*, Franch., especially such forms of the latter as suggest a single solitary capitulum.

**Daedalacanthus Wardii**, W. W. Sm. Sp. nov.

Species valde affinis *D. purpurascenti*, T. Anders. et *D. ciliato*, Craib a quibus caule fulvo-hirsuto, foliis utrinque plus minusve pubescentibus, inflorescentiis minoribus subcapitatis, bracteis subtus fulvo-pilosis, corolla minore divergit.

Frutex ad 1 m. altus erectus sparsim ramosus. Caules supra densius infra laxius fulvo-hirsuti. Folia petiolo 1-1.5 cm. longo dense fulvo-hirsutulo praedita; lamina foliorum superiorum ad 8 cm. longa, ad 3.5 cm. lata, elliptico-lanceolata vel subelliptica, apice breviter acuminata, basi late cuneata vel subrotundata, margine undulata, supra ad costam fulvo-pubescentes setulis hic illic conspersa, utrinque lineolata, infra ad costam nervosque dense fulvo-pubescentes caeterum sparsim puberula. Inflorescentiae pedunculo 1 cm. longo (vel tandem aucto) dense fulvo-hirsuto praeditae, subcapitatae pauciflorae; bracteae ad 2 cm. longae, lanceolatae, acuminatae, apice ipso obtusiusculae, longe ciliatae, utrinque praecipue ad costam venasque conspicuas fulvo-hirsutulae; bracteolae lineari-lanceolatae calycem subaequant. Calyx circ. 3 mm. longus in lobos 5 lineari-lanceolatos acutos ad medium divisus pubescens. Corolla 2.5-3 cm. longa, laete violacea, pubescens, tubo paulo curvato, limbo circ. 1 cm. diametro, lobis oblongis. Stamina duo e tubo corollino paulo exserta. Ovarium stylusque sparsim hirsutuli.

"Upper Burma:—River-bed between Putao and Myitkyina. In open sandy places on edge of jungle. Small lax undershrub of 2-3 ft. Flowers bright violet. December 1914." F. K. Ward. No. 2003.

This Burmese plant is a close ally of the Indian *D. purpurascens*, T. And., which extends through Assam into Burma.

**Dicliptera elegans**, W. W. Sm. Sp. nov.

Species affinis *D. chinensi*, Nees a qua bracteis fere orbicularibus, pedunculis pedicellisque densissime albo-tomentosis inter alia recedit.

Planta 60-120 cm. alta erecta caulibus supra gracilibus sulcatis (sulcis tomento albido saepe impletis) ceterum sparsim pubescentibus. Folia superiora tantum visa petiolo 1.5-2 cm. longo anguste alato plus minusve hirsuto suffulta; lamina 7-8 cm. longa, ad 4 cm. lata, ovata vel ovato-lanceolata, apice acuminata, basi late cuneata in petiolum decurrens vel subrotundata, margine integra, tenuiter membranacea, supra atroviridis sparsim pilosula ad costam dense fulvo-pilosa, infra pallidior ubique sparsim pilosula. Inflorescentia paniculata ampla; pedunculi primarii ex axillis superioribus orientes ad



7 cm. longi tomento albo deterrenti saepe induti, apice bracteis lineari-subulatis ad 1 cm. longis saepe pilosis praediti; pedunculi secundarii 3-6-nati, 5-10 mm. longi, albo-tomentosi vel dense fulvido-pilosi; bracteae florales inaequales suborbiculares, circ. 1.5 cm. longae, circ. 1.3 cm. latae, apice longiuscule mucronatae, basi rotundatae, virides, tenuiter membranaceae, extra sparsim pilosulae et lineatae, intus lineatae, flores 3-4 bracteolasque includentes; bracteolae 5-7 mm. longae lineari-lanceolatae longe acuminatae minute puberulae vel albo-pilosulae. Calyx 6-7 mm. longus in lobos 5 lineari-lanceolatos acuminatos minute puberulos partitus. Corollae circ. 1.8 cm. longae pallido-roseae tubus gracilis extra plus minusve albido-pilosulus, limbus alte bilabiatus. Stamina 2 antheris bicellulatis. Ovarium minute pilosulum stylo filiformi.

"China:—Descent to the Yangtze from the eastern boundary of the Lichiang Valley. Lat. 27° 15' N. Alt. 9000 ft. Semi-shrubby plant of 2-4 ft. Flowers pale rose. Shady open situations on the margins of thickets. July 1913." G. Forrest. No. 10,697.

A graceful plant with very characteristic bracts.

#### *Dicliptera induta*, W. W. Sm. Sp. nov.

Species affinis *D. Roxburghianae*, Nees a qua caulibus dense fulvo-hirsutulis, bracteis rigidis papyraceis inter alia recedit.

Caulis ramosi primo dense fulvo-tomentosi, deinde hirsutuli. Folia petiolo circ. 1 cm. longo fulvo-tomentoso vel fulvo-hirsutulo praedita; lamina 3-4 cm. longa, 1.5-2.5 cm. lata, ovata, apice plus minusve acuta, basi late cuneata vel subrotundata, integra, membranacea, utrinque ad costam nervosque densiuscule fulvo-pilosa ceterum sparsim pilosa. Inflorescentiae cymosae cymulis axillaribus brevipedunculatis, terminalibus non visis; pedunculi primarii et secundarii brevissimi vix 2-3 mm. superantes dense fulvo-hirsutuli; bracteae inferiores circ. 5 mm. longae lineari-subulatae pilosulae; bracteae florales inaequales oblanceolatae 1-1.4 cm. longae, apice acutatae et mucronatae, basi cuneatae, opaco-virides, rigidae subpapyraceae, utrinque pilosulae; bracteolae ad 1 cm. longae lineari-lanceolatae longissime acuminatae pilosae. Calyx circ. 5 mm. longus in lobos 5 lineares acutissimos puberulos divisus. Corollae ad 1.5 cm. longae tubus gracilis extra albido-pilosulus. Stamina 2 antheris bicellulatis, polline typico. Ovarium minute pilosulum.

"China:—N.E. Yunnan. Plain of Kiao-Kiou. Alt. 400 m. Flowers rose." Maire in Herb. Edin. under 826/1913.

A weedy plant of the cultivated area. I cannot match this among the Indo-Chinese species of *Dicliptera*.

**Elsholtzia penduliflora**, W. W. Sm. Sp. nov.

Species affinis *E. polystachyae*, Benth. a qua verticillastris remotioribus, floribus majoribus plus minusve pendulis, fructibus pendulis inter alia signa bene notata.

Planta suffruticosa aromatica ad 1.2 m. alta, ramis quadratis, glandulis nitentibus pilisque brevibus crispatis conspersa. Folia membranacea petiolo 2-5 mm. longo rubrido sparsim pilosulo praedita; lamina foliorum superiorum 6-16 cm. longa, 2-4 cm. lata, lanceolata, apice sensim et longiuscule acuminata, basi late cuneata vel subrotundata, margine regulariter serrata, supra ad costam nervosque furfuraceo-pilosula, infra subglabra nitenti-succino-glandulosa, costa nervisque prominulis rubidis. Inflorescentiae terminales et axillares; terminalis fructifera ad 22 cm. longa; rhachis plus minusve albido-pilosa; verticillastri 6-12-flori laxiuscule approximati inflorescentiam angustam subspiciformem formantes; pedicelli 2-4 mm. longi plus minusve pendentes; bractee lineares vel lineari-oblongae pedicellos vulgo duplo superantes. Flores parvi albi. Calyx circ. 3 mm. longus fructu ad 5 mm. auctus, tubuloso-campanulatus glaber; lobi circ. 1.25 mm. longi subulato-lineares. Corollae tubus paululo exsertus, lobi rotundati, posticus emarginatus. Stamina 4 paulo exserta. Nuculae ovoideae circ. 1.25 mm. longae pallide brunneae.

"China:—Western flank of the Tali Range. Lat. 25° 40' N. Alt. 10,000 ft. Aromatic half-shrubby plant of 4 ft. Flowers white. Open scrub in side valleys. July 1913." G. Forrest. No. 11,686.

**Eranthemum shweliense**, W. W. Sm. Sp. nov.

Species affinis *E. albo*, Nees a quo ramulis hispidulis, foliis senioribus sub anthesi deciduis, inflorescentiis plus minusve aggregatis, corollae tubo brevioris recedit; caulibus supra lignosis, floribus albis cum illa specie congruit.

Planta 1-2 m. alta erecta caulibus supra lignosis cinerascens, juvenilibus primo hispidulis. Folia seniora sub anthesi decidua nobis non visa; folia juniora petiolo 3-5 mm. longo dense fulvo-hirsutulo praedita; lamina 2.5-5.5 cm. longa, 1-2 cm. lata, lanceolata vel ovato-lanceolata vel subelliptica, apice obtusiuscula vel acutata nunc apiculata, basi plus minusve cuneata in petiolum decurrens, margine integra, membranacea, supra atroviridis ubique minute papillata, ad costam sparsim pilosula, infra opaco-olivacea ad costam densiuscule fulvido-pilosula caeterum sparsim pilosula vel glabrescens. Inflorescentiae 7-15 cm. longae spiciformes ad apices ramulorum dispositae, plus minusve aggregatae, rhachi dense fulvo-pilosula,

floribus fasciculatis; bracteae circ. 3 mm. longae lineares vel lineari-lanceolatae ut rhachis pilosulae. Calyx circ. 5 mm. longus in lobos 5 lineari-oblongos acutos fere ad imum fissus plus minusve pilosulus. Corollae albae tubus circ. 2.2 cm. longus cylindricus supra haud ampliatus extra minute pilosulus intus albo-pilosus, limbus 1.8-1.9 cm. latus, lobi ovales quinque quorum duo violaceo-maculati. Stamina 2 e tubo corollino paululo exserta. Ovarium glabrum stylo filiformi infra saepe sparsim piloso.

"China:—Valley of the Shweli, Yunnan. Lat. 25° N. Alt. 6000 ft. Shrub of 3-6 ft. Flowers white or very pale lavender with violet markings on lower lobe. Open situations. May 1913." G. Forrest, No. 9859.

"Mengtze, S.W. Mountains; 4000 ft.; shrub 4 ft.; white flowers." A. Henry. No. 11,010.

**Eranthemum tapingense**, W. W. Sm. Sp. nov.

Species ex affinitate *E. indici*, Clarke a quo foliis angustioribus 7-12-nerviis, calyce duplo majore aliter fisso, corolla minore rosea nec alba inter alia recedit.

Planta circ. 1 m., alta erecta vel suberecta caulibus lignosis glabris vel subglabris primo atro-coloratis deinde decorticantibus ad internodia stramineis prope nodos atro-persistentibus. Folia petiolo 2-2.5 cm. longo sparsim puberulo glabrescente suffulta; lamina ad 17 cm. longa, 3-5 cm. lata, rarius ad 7 cm., lanceolata vel oblongo-lanceolata, apice acuminata, basi cuneata, margine undulata, membranacea, supra opaco-viridis glabra vel cito glabrescens minute lineolata, infra pallidior glabra vel subglabra, nervis plerumque 8-12-paribus, Inflorescentiae racemiformes terminales vel axillares simplices vel ramosae 7-20 cm. longae, plus minusve secundiflorae, pedunculis sparsim pilosulis vel glabrescentibus, bracteis 2-3 mm. longis pilosulis vel subglabris, pedicellis 2-3 mm. longis. Calyx circ. 1 cm. longus subtubulosus ad medium vel vix ad medium in lobos inaequales anguste triangulares acutos fissus atro-ruber glaber. Corolla 2.5 cm. longa vel paulo longior leviter curvata rosea; tubus 2 cm. longus dimidio inferiore cylindricus, dimidio superiore tubuloso-ventricosus, extra minute puberulus; labium inferius trilobum lobis subrotundatis saepe minute erosulis, labium superius bilobulatum. Stamina 2 filamentis complanatis sparsim pilosulis antheris 4 mm. longis bicellulatis. Stylus filiformis minute pubescens stigmatate breviter bifido; ovarium glabrum.

"Burma:—Taping Valley, Upper Burma. Lat. 24° 20' N. Alt. 2000 ft. Shrubby plant of 2-4 ft. Flowers pale rose. In shady jungle. Feb. 1913." G. Forrest. No. 9655.

"Valley of the Taping. Lat. 24° 25' N. Alt. 3000 ft.

Plant of 2 ft. Flowers pale rose. Shady moss-covered rocks. Jan. 1913." G Forrest. No. 9484.

"Valley of the Taping. Lat. 24° 30' N. Alt. 2000 ft. Shrubby plant of 3-4 ft. Flowers pale purplish-rose. Shady situations by streams. Feb. 1914." G. Forrest. No. 12,149.

A species closely allied to *E. indicum*, Clarke and *E. lateriflorum*, Clarke, differing from both in the calyx. These three plants are undoubtedly congeneric, and differ markedly in the corolla from the typical members of the genus. *E. indicum* has been referred to the American *Thyrsacanthus* (otherwise *Odontonema*), to *Asystasia*, to *Mackaya* (South African), and has been made the type of a new genus by Lindau, *Odontonemella*. There is much to be said in favour of Lindau's grant of generic rank.

***Helicia annularis*, W. W. Sm. Sp. nov.**

Species quoad flores affinis *H. silvicolae*, W. W. Sm. infra descriptae sed subglabra et foliis minoribus tenuiter membranaceis, et squamis hypogynis in anulum connatis inter alia divergit.

Arbor parva ad 6 m. alta. Ramuli graciles glabri brunnei tandem cinerascens. Folia petiolo circ. 1 cm. longo gracili glabro instructa; lamina plerumque 8-12 cm. longa, 3-4.5 cm. lata, plus minusve elliptica, apice breviter et obtusiuscule caudato-acuminata, basi late cuneata, margine serratulis satis grossis indurato-apiculatis notata vel nonnunquam subintegra, in sicco tenuiter membranacea, seniores subpapyracea, utrinque opaco-viridis glabra vel cito glabra, costa utrinque eminente, nervis 6-8 paribus gracillimis, reticulo venularum subinconspicuo. Inflorescentiae 9-16 cm. longae ex axillis foliorum subsistentium ortae, erectae, multiflorae, basi excepto floriferae; rhachis glabra vel cito glabrescens; bracteae bracteolaeque minimae, fere squamiformes, ovatae ad lineares, pilosulae; pedicelli 2-3 mm. longi pilosuli vel subglabri, solitarii vel 2-3-fasciculati. Flores 11-12 mm. longi extra glabri pallido-flavidi. Antherae fere 3 mm. longae. Ovarium circ. 2.5 mm. longum glabrum stylo gracili glabro. Squamae hypogynae in anulum circ. 1 mm. altum connatae. Fructus immaturus ovideus fere niger.

"China:—Yunnan; Szemao woods at 4600 ft., tree 20 ft., with pale yellow flowers." A. Henry. No. 12,315.

Henry No. 12,315B from tree of 10 ft. with blackish fruit appears to be the same.

**Helicia clivicola**, W. W. Sm. Sp. nov.

Species affinis *H. excelsae*, Bl. et *H. pyrrobobyae*, Kurz a quibus costa nervisque utrinque ferrugineo-tomentosis inter alia cognoscitur.

Arbor 8-12 m. alta. Ramuli primo dense molliterque ferrugineo-tomentosi, postea incanescens, tarde glabrescentes. Folia petiolo 1.5-2.5 cm. longo dense ferrugineo-tomentoso suffulta; lamina 14-19 cm. longa, 8-9 cm. lata, obovata vel late oblanceolata, apice circuitu rotundata apice ipso saepe breviter acuminata, basi sensim in petiolum cuneata, margine integra vel denticulis rarissimis notata subundulata, in sicco subcoriacea, supra atroviridis, infra multo pallidior, costa nervisque 7-9 paribus supra paululo eminentibus primo ferrugineo-tomentosis tandem glabrescentibus infra prominulis tomento denso ferrugineo persistente indutis, reticulo venularum utrinque conspicuo. Inflorescentiae spiciformes ad 20 cm. longae, in axillis foliorum subpersistentium vel nuperime delapsorum ortae, undique floriferae, dense ferrugineo-tomentosae; bracteae bracteolaeque circ. 1 mm. longae, lineari-lanceolatae vel lineares, longiuscule ferrugineo-hirsutae; pedicelli 2-3 mm. longi sparsim tomentosi vel glabrescentes. Flores circ. 1.5 cm. longi, extus glabri, laete lutei, fragrantis. Antherae 3 mm. longae. Ovarium stylusque glabri. Squamae hypogynae late oblongae liberae. Fructus deest.

"China:—Yunnan; hills to the south of Tengyueh. Lat. 25° N. Alt. 6000-7000 ft. Tree of 25-40 ft. Flowers bright yellow, fragrant. In thickets. June 1912." G. Forrest. No. 8333.

**Helicia pallidiflora**, W. W. Sm. Sp. nov.

Species affinis *H. terminali*, Kurz a qua inflorescentiis lateralibus nec terminalibus, rhachibus pedicellisque plus minusve ferrugineo-tomentellis nec glabris recedit; ab *H. excelsa*, Bl. ovario glabro inter alia cognoscitur.

Arbor parva ex collectore ad 7.5 m. alta. Ramuli primo ferrugineo-tomentelli, mox glabrescentes, seniores glabri cinerei. Folia petiolo 5-15 mm. longo gracili supra alato sparsim ferrugineo-hirsutulo suffulta; lamina plerumque 15-24 cm. longa, 4-7 cm. lata, oblanceolata, apice acuta vel breviter acuminata vel nonnunquam subtrotundata, basi in petiolum cuneatim attenuata, margine integra paululo undulata, in sicco juniora membranacea, supra atroviridis sublucida, infra vix pallidior, utrinque glabra, costa nervisque 7-9 paribus cum reticulo venularum utrinque plus minusve eminentibus. Inflorescentiae 12-25 cm. longae ex axillis foliorum delapsorum

ortae, graciles, ut videtur plus minusve pendentes, multiflorae, basi nudae; rhachis plus minusve ferrugineo-tomentella, basi glabrescens; bracteae bracteolaeque lineares vel subulatae 1-2 mm. longae tomentellae; pedicelli 6-8 mm. longi tomentelli simplices vel saepe biflorae. Flores 12-13 mm. longi, extra plerumque sparsim tomentelli pallido-flavidi. Antherae circ. 3 mm. longae. Ovarium parvum circ. 1 mm. longum glabrum stylo gracili glabro. Squamae hypogynae oblongo-quadratae liberae. Fructus deest.

"China:—Yunnan; Szemao forests at 5000 ft.; tree 25 ft., with pale yellow flowers." A. Henry. No. 11,910A.

Henry Nos. 11,910 and 11,910B in Herb. Edin. appear to be the same species.

**Helicia shweliensis**, W. W. Sm. Sp. nov.

Species ex affinitate *H. erraticae*, Hook. f. a qua bracteis conspicuis foliaceis viridibus inter alia dignoscitur.

Arbor 5-10 m. alta. Ramuli glabri vel subglabri nisi ad insertiones foliorum rufo-tomentellas, seniores brunnescentes vel nigricantes. Folia juniora petiolo 2-3 mm. longo glabro (nisi ad basim ipsam) praedita; lamina plerumque 6-9 cm. longa, 2.5-3.5 cm. lata, obovata vel oblanceolata, apice acuta vel e circuitu rotundato breviter abrupteque acuminata, basi in petiolum sensim attenuata, margine denticulis glanduloso-apiculatis conspicuis notata, in sicco membranacea, glaberrima, supra atroviridis infra flavido-viridis, costa nervisque 6-7 paribus utrinque paululo eminentibus; folia seniora in speciminibus fructiferis saepe majora ad 13 cm. longa, ad 5 cm. lata subcoriacea ad 7 mm. petiolata. Inflorescentiae spiciformes 7-11 cm. longae, ex axillis foliorum delapsorum ortae, undique floriferae, glabrae; bracteae conspicuae 5-20 mm. longae foliaceae lanceolatae vel lineari-lanceolatae virides glabrae; bracteolae circ. 2 mm. longae; pedicelli 3-4 mm. longi glabri. Flores circ. 1.3 cm. longi, extra glabri, lacte lutei, fragrant. Antherae 3 mm. longae. Ovarium stylusque glabri. Squamae hypogynae rotundatae liberae. Fructus vix maturus circ. 1 cm. diametro ovoideus.

"China:—Yunnan, valley of the Shweli (Lung Chiang). Lat. 25° N. Alt. 6000 ft. Shrub or tree of 15-30 ft. Flowers bright lemon yellow, fragrant. In thickets. May 1912." G. Forrest. No. 7852.

The following in fruit appear to be the same:—

"Yunnan, divide between the Shweli and Tengyueh Valleys. Lat. 25° N. Shrub of 6-12 ft. In fruit. In open thickets. Alt. 7000 ft. July 1912." G. Forrest. No. 8766.

"Yunnan, Shweli Valley. Lat. 25° N. Alt. 7000 ft.

Shrub of 15-20 ft. In fruit. In thickets. Dec. 1912." G. Forrest. No. 9455.

**Helicia silvicola**, W. W. Sm. Sp. nov.

Species affinis *H. excelsae*, Bl. a qua ovario glabro facile distinguitur; haud procul ab *H. pallidiflora*, W. W. Sm. supra descripta quae foliis floribusque divergit.

Arbor parva ex collectore ad 6 m. alta. Ramuli primo dense et longiuscule ferrugineo-tomentosi, tarde glabrescentes. Folia petiolo 2-3 cm. longo dense ferrugineo-tomentoso instructa; lamina 15-25 cm. longa, 3-6 cm. lata, plerumque oblanceolata, apice acuminata, basi in petiolum cuneatim attenuata, margine serratulis crebris rigidis glanduloso-apiculatis notata, in sicco papyracea, supra opaco-viridis infra vix pallidior, utrinque glabra vel subglabra nisi ad costam primo plus minusve ferrugineo-tomentellam tandem saepe fere glabram, costa nervisque 10-12 paribus infra eminentibus, reticulo venularum utrinque subconspicuo. Inflorescentiae ad 15 cm. longae ex axillis foliorum subsistentium ortae, erectae vel suberectae, multiflorae, fere undique floriferae; rhachis dense ferrugineo-tomentosa; bracteae bracteolaeque ovato-lanceolatae ad lineares, 2-3 mm. longae, tomentellae; pedicelli 2-4 mm. longi, ferrugineo-hirsuti mox glabrescentes, solitarii vel plerumque 2-4-fasciculati. Flores 11-12 mm. longi extra glabri pallido-flavidi. Antherae circ. 3 mm. longae. Ovarium circ. 2 mm. longum glabrum stylo gracili glabro. Squamae hypogynae oblongo-quadratae basi paululo cohaerentes. Fructus deest.

"China:—Yunnan. Szemao forests at 6500 ft. Tree 20 ft. With pale yellow flowers." A. Henry. No. 13,075.

**Helicia vestita**, W. W. Sm. Sp. nov.

Species affinis *H. grandis*, Hemsl. a qua foliis minoribus satis longe petiolatis, racemis erectis ex axillis foliorum subsistentium ortis, floribus minoribus, imprimis ovario dense et longiuscule ferrugineo-hirsuto divergit.

Arbor circ. 9 m. alta. Ramuli primo densissime et molliter ferrugineo-tomentosi tarde glabrescentes. Folia petiolo plus minusve 2.5 cm. longo dense ferrugineo-tomentoso praedita; lamina ad 22 cm. longa, ad 8 cm. lata, anguste obovata vel oblanceolata, apice sensim acutata vix acuminata, basi in petiolum cuneatim angustata, margine denticulis conspicuis remotiusculis notata, in sicco subcoriacea, supra viridis lucida, glabra nisi ad costam basi ferrugineo-tomentosam, infra tomento tersili denso crispato ferrugineo velata, costa nervisque 7-8

paribus supra vix eminentibus infra elevatis, reticulo venularum utrinque conspicuo. Inflorescentiae spiciformes ad 14 cm. longae, in axillis foliorum subpersistentium ortae, fere ad basim floriferae, densissime ferrugineo-tomentosae; bracteae inconspicuae adpressae anguste ovatae dense tomentosae; pedicelli 2 mm. longi, crassi tomentosi. Flores 2-3-fasciculati vel solitarii, circ. 2 cm. longi, extra densissime ferrugineo-tomentosi. Antherae circ. 4 mm. longae. Ovarium circ. 2.5 mm. longum dense ferrugineo-hirsutum, stylo gracili glabro. Squamae hypogynae subquadratae liberae. Fructus deest.

"China:—Yunnan. Mountains south of Szemao. 4500 ft. Tree of 30 ft." A. Henry. No. 12,159.

**Hemigraphis fluviatilis**, Clarke Mss. in Herb. Kew. descr.  
W. W. Sm.

Species inter affines indicas atque sinenses floribus parvis flavis bene notata.

Planta ad 18 cm. alta basi lignosa atque saepe multicaulis; caules basi decumbentes dense albido- vel fulvido-strigoso-hirsuti. Folia petiolo 2-3 mm. longo strigoso-hirsuto suffulta supra subcongesta; lamina ad 3.5 cm. longa, ad 1 cm. lata, lanceolata vel elliptico-lanceolata, apice obtusiuscula, basi cuneata, margine crenato-serratula, in sicco papyracea, supra opaco-viridis infra paulo pallidior, utrinque dense albido-strigoso-hirsuta; nervi 4-5 paria supra obscuri, infra eminentes. Flores plerumque in spicas subglobosas circ. 2.5 cm. longas circ. 2 cm. latas congestas basi bene foliatis dispositi; pauci nonnunquam in axillis inferioribus; bracteae bracteolaeque lanceolatae ad lineares circ. 1 cm. longae strigoso-hirsutae. Calyx circ. 8 mm. longus strigoso-hirsutus in lobos lineares acutos fere ad imum fissus. Corolla ad 1 cm. longa flava glabra; tubus basi cylindricus supra sensim ampliatus; lobi rotundati circ. 2 mm. diametro. Stamina perfecta 4 filamentis sparsim pilosulis, polline typico. Ovarium oblongum apice dense albido-pilosulum; stylus pilosulus. Fructus oblongus seminibus circ. 8.

"China:—Yunnan, Red River bank, in sand, near Manpan. Yellow flowers." Henry in Herb. Kew. et Herb. Edin. No. 9535.

**Justicia albovelata**, W. W. Sm. Sp. nov.

Species affinis *J. quadrifariae*, Wall. affinis a qua caulibus longissime et dense albo-pilosis inter alia signa differt.

Fruticulus basi crassus ramosissimus caules numerosos annuos 25-40 cm. altos flexiles bene foliatis pilis longissimis albis patentibus densissime indutos emittens. Folia petiolo 3-5



mm. longo pilis iisdem dense obsito suffulta; lamina ad 3.5 cm. longa, ad 1.4 cm. lata, lanceolata rarius subelliptica, apice obtusiuscula, basi cuneata, integra, membranacea, pilis longis albis supra sparsius infra densius praedita. Flores in axillis fere omnibus orientes circ. 4-fasciculati; bracteae 5-10 mm. longae, orbiculari-spathulatae vel obovatae, ut folia indutae; bracteolae parvae oblanceolatae vel lineares similiter indutae; pedicelli brevissimi. Calyx pallide viridis 5-6 mm. longus in lobos lineari-lanceolatos acuminatos ad costulam albo-pilosos fere ad imum fissus. Corollae circ. 9 mm. longae pallido-flavidae extra albo-pilosulae tubus limbo paulo longior supra ampliatus; limbi labium posticum brevissime bifidum, anticum trilobum lobis brevibus mediano majore. Stamina 2 filamentis infra pilosulis antherarum loculis inferioribus longiuscule albo-calcaratis. Ovarium maturum glabrum seminibus quatuor minute tuberculatis.

"China:—On the Tong Shan in the Yangtze bend, Yunnan. Lat. 27° 20' N. Alt. 9000 ft. Plant of 10-16 inches. Flowers pale yellow. Open stony situations. Sept. 1913." G. Forrest. No. 10,996.

The densely white-haired stems mark this out from *J. quadrifaria*, Wall. and its allies.

***Justicia microdonta*, W. W. Sm. Sp. nov.**

Species affinis *J. Gendarussae*, Linn. f. a qua foliis longe recedit.

Frutex ad 2 m. altus ramosissimus caulibus primo sparsim pilosulis mox glabrescentibus cinerascens. Folia petiolo circ. 1 cm. longo sparsius pilosulo praedita; lamina ad 6.5 cm. longa, ad 3.5 cm. lata, plerumque ovata, apice obtusiuscula brevi-acuminata, basi late cuneata in petiolum longe decurrens, integra, tenuiter membranacea, supra opaco-viridis ad costam nervosque marginemque fulvido-pilosula ceterum minute pubescens, infra subolivacea tantum ad costam nervosque pilosula. Inflorescentiae spiciformes 7-10 cm. longae ramulos terminantes interruptae; pedunculus brevis; rhachis plus minusve dense pilosula; flores 2-4-fasciculati pedunculis secundariis pedicellisque brevissimis suffulti; bracteae bracteolaeque 3-5 mm. longae lineari-lanceolatae pilosulae. Calyx circ. 5 mm. longus pilosulus in lobos lineari-lanceolatos acutos fere ad imum fissus. Corollae circ. 1.3 cm. longae albae roseo-tinctae extra plus minusve pilosulae tubus limbo paulo longior basi latiusculus supra sensim ampliatus; limbi labium posticum breviter bifidum, anticum trilobum lobis 4-5 mm. longis intus pilosulis margine minute ciliatis. Stamina 2 filamentis infra complanatis pilosulis, antherarum loculis inferioribus minute

albo-calcaratis. Ovarium glabrum stylo densiuscule pilosulo. Fructus maturus circ. 2 cm. longus seminibus 4 complanatis 3-4 mm. diametro rugoso-verruculosis.

"China:—Mountains of the Chungtien plateau, Yunnan. Lat 27° 30' N. Alt. 10,000 ft. Shrub of 4-6 ft. Flowers white, flushed rose, with a few deeper coloured markings, amongst open scrub. July 1914." G. Forrest. No. 12,822.

"Yangtze Valley at Pung-tzu-la, Yunnan. Lat. 28° 12' N. Alt. 7000 ft. Shrub of 4 ft. Flowers creamy-white. Open dry situations amongst rocks. Aug. 1914." G. Forrest. No. 13,162.

**Justicia Wardii**, W. W. Sm. Sp. nov.

Species affinis *J. siccanæ*, W. W. Sm. a qua floribus fasciculatis bracteis bene praeditis fere duplo majoribus inter alia divergit.

Fruticulus diffusus ad 60 cm. altus; caules flexuosi ramosi primo dense cinereo-tomentelli mox glabrescentes substraminei. Folia petiolo circ. 5 mm. longo cinereo-pilosulo praedita; lamina ad 4.5 cm. longa, ad 2 cm. lata (in foliis superioribus tantum visis), elliptica vel elliptico-lanceolata vel oblanceolata nunc obovata, apice breviter acuminata vel acuta vel rarius rotundata, basi cuneata, margine paulo undulata, tenuiter papyracea, utrinque sparsim pilosula; juvenilia incano-tomentella. Flores ad 2 cm. longi, in axillis superioribus 4-6-fasciculati, haud terminales, inflorescentiam subspicatam interruptam formantes; pedicelli 2-3 mm. longi vel obsoleti; bractee numerosae subinvolucrantes circ. 5 mm. longae lineari-lanceolatae dense cinereo-pilosulae. Calyx ad 8 mm. longus dense pilosulus in lobos lineari-oblongos acutos ad duas partes vel ultro partitus. Corollae fere 2 cm. longae extra albido-pilosulae tubus limbo paulo longior basi cylindricus supra ampliatus; limbi in sicco rubridi labium posticum 7-8 mm. longum breviter bifidum, anticum ad medium in lobos oblongos trifidum. Stamina 2 filamentis supra glabris prope insertionem albo-villosulis, antherarum oculis inferioribus albo-calcaratis. Ovarium glabrum.

"China:—N.W. Yunnan; by streams in arid region of Yangtze. Alt. 10,000 ft. Straggling shrub, spreading a good deal. Stems 1-2 ft. high. May 1913." F. K. Ward. No. 301.

**Loranthus scoriarum**, W. W. Sm. Sp. nov.

Species ex affinitate *L. coccinei*, Jack a quo foliis lanceolatis apice basique attenuatis inter alia recognoscitur.

Frutex circ. 1 m. altus. Ramuli primo tenuiter ferrugineo-

puberuli mox glabrescentes. Folia opposita vel subopposita rarius alterna petiolo circ. 5 mm. longo furfuraceo-puberulo suffulta; lamina 5-10 cm. longa, 1.5-4 cm. lata, lanceolata vel ovato-lanceolata vel rarius oblanceolata, apice acuta vel acuminata, basi in petiolum sensim cuneata, in sicco papyracea, adulta utrinque glabra vel fere glabra (juvenilia utrinque ferrugineo-furfuracea subtus densissime), costa subtus prominula, nervis 4-5-paribus subobscuris. Inflorescentiae axillares circ. 3 cm. longae spiciformes 10-12-florae; rhachis erectiuscula ferrugineo-furfuracea tandem glabrescens; pedicelli nulli; bracteae solitariae circ. 1 mm. longae late ovatae obtusae ferrugineo-tomentellae. Calyx subquadrato-globosus circ. 2 mm. longus lobis vix evolutis extra dense ferrugineo-tomentellus. Corolla circ. 1 cm. longa recta tetramera, extra furfuracea, rubido-aurantiaca, segmentis oblongis patentibus. Stylus 1 cm. longus gracilis glaber stigmatibus capitato coronatus.

"China:—Outskirts of lava bed west of Tengyueh, Yunnan. Lat. 25° N. Alt. 5000 ft. Shrub of 2-4 ft. Flowers reddish-orange. Parasite on many large trees. May 1912." G. Forrest. No. 7689.

In a note Mr. Forrest says that the plant was brought in by natives. The locality is correct, but he cannot vouch for the accuracy of all the statements on the ticket. The species is closely akin to *L. coccineus*, Jack, a Burmese and Malayan species.

### **Lysionotus Forrestii**, W. W. Sm. Sp. nov.

Species affinis *L. ophiorrhizoidei*, Hemsl. ex descriptione esse videtur; inter species chinenses et burmanicas foliis in sicco tenuiter membranaceis, petiolis plus minusve hirsutulis, pedicellis longissimis gracillimis 1-2-floris, inter alia recognoscitur.

Fruticulus 60-75 cm. altus erectus ramosus, ramis flexuosis gracilibus primo dense fulvo-hirsutulis tandem glabrescentibus, senioribus cinerascentibus et decorticantibus. Folia ternata vel opposita, petiolo 1-2 cm. longo plus minusve dense fulvo-hirsutulo praedita; lamina plerumque 6-8 cm. longa, 2.5-3.5 cm. lata, ovato-lanceolata vel subelliptica, apice acuta vel acuminata, basi plus minusve late cuneata, margine integra vel remote et irregulariter serrata, tenuiter membranacea, supra opaco-viridis, infra olivacea, utrinque glabra, costa nervisque pagina inferiore distinctis. Inflorescentiae in axillis foliorum superiorum ortae 1-2-florae; pedunculi 3-4 cm. longi, gracillimi, flexuosi, glabri vel ad basim sparsim hirsutuli; bracteae 2-3 mm. longae, lineari-oblongae, glabrae; pedicelli 5-10 mm. longi, glabri. Flores circ. 3.5 cm. longi rosei et lutei. Sepala circ. 1 cm. longa, lineari-lanceolata, subfalcata, basi vix connata. Corollae bilabiatae tubus circ. 2.5 cm. longus cylindricus supra

paulo ampliatus glaber; lobi rotundati. Stamina perfecta duo inclusa. Stigma vix bilobum; ovarium glabrum. Fructus maturus deest.

"West China:—Western flank of the Shweli-Salween divide, Yunnan. Lat. 25° 20' N. Alt. 9000 ft. Undershrub of 2-2½ ft. Flowers rose and yellow. Open shady situations. Aug. 1912." G. Forrest. No. 9084.

**Lysionotus gracilis**, W. W. Sm. Sp. nov.

Species affinis *L. Wardii*, W. W. Sm. infra descriptae, a qua foliis acuminatis, bracteis linearibus, calycis segmentis linearibus inter alia distinguitur.

Fruticulus 15-30 cm. altus erectus vel suberectus, super arborum truncos saxaque errans. Caulis gracilis basi saepe radicans undique plus minusve brunneo- vel fulvido-hirsutulus. Folia ternata vel opposita, petiolo 3-8 mm. longo pilis articulatis hirsutulo suffulta; lamina 2-6 cm. longa, 1-1.5 cm. lata, plerumque anguste lanceolata, apice longiuscule acuminata, basi cuneata, margine plus minusve grossi-dentata, coriacea, opacoviridis, supra glabra nisi ad apicem saepe sparsim pilosum, infra glabra nisi ad basim costae, costa utrinque paulo prominula, nervis 5-6 paribus in sicco obscuris. Inflorescentiae in axillis foliorum superiorum ortae, in speciminibus nostris 1-2-florae; pedunculi 3-4.5 cm. longi, gracillimi, flexuosi, sparsim pilosi vel saepe glabrescentes; bractee bracteolaeque 2-3 mm. longae, lineari-oblongae, glabrae; pedicelli ad 5 mm. longi, glabri. Flores fere 3 cm. longi, albi striis venisque roseo-purpureis. Sepala basi paululo connata, 8-9 mm. longa, lineari-oblonga, glabra. Corollae bilabatae angustae tubus circ. 1.8 cm. longus basi cylindricus glaber vel subglaber; lobi rotundati intus furfuraceo-pubescentes. Stamina perfecta duo inclusa. Stylus stamina fere aequans stigmatibus obscure bilobo. Ovarium lineare sparsim furfuraceum. Fructus deest.

"Upper Burma:—Valley of Naung-chaung. Alt. 6000-7000 ft. In forest or open but sheltered places. Undershrub on moss-clad tree trunks and rocks. Flowers white, striped and veined with pinkish purple. August 1914." F. K. Ward. No. 1894.

**Lysionotus Wardii**, W. W. Sm. Sp. nov.

Species affinis *L. serratae*, D. Don sed multo minor; caulis et petiolis et paginis foliorum inferioribus plus minusve dense hirsutulis inter alia recedit.

Suffrutex circ. 20 cm. altus erectus vel suberectus, super arborum truncos saxaque errans. Caulis gracilis, basi radicans,

undique plus minusque fulvo- vel rufido-hirsutulus. Folia ternata vel opposita, petiolo 2-3 mm. longo dense hirsutulo suffulta; lamina 2.5-4.5 cm. longa, 7-10 mm. lata, anguste lanceolata vel elliptico-lanceolata, apice acuta vel obtusiuscula, basi cuneata vel subrotundata, margine integra vel obscure crenato-serrata, coriacea, opaco-viridis, supra glabra, infra plus minusve dense fulvo-hirsutula, costa media infra eminente, nervis in sicco subobscuris. Inflorescentiae in axillis foliorum superiorum ortae, in specimine nostro biflorae; pedunculi ad 7.5 cm. longi, gracillimi, flexuosi, infra hirsutuli, supra glabri vel mox glabrescentes; bracteae circ. 2.5 mm. longae, ovatae, glabrescentes; pedicelli 7-8 mm. longi, glabri. Flores circ. 4 cm. longi, violacei. Sepala 3 mm. longa, 1.5 mm. lata, elliptica, apice indurato-apiculata, fere glabra. Corollae bilabatae angustae tubus circ. 2.5 cm. longus, basi cylindricus pilis articulatis albidis dense indutus, supra paulo ampliatus glabrescens; lobi rotundati. Stamina perfecta duo, staminodia 2, inclusa. Stigma breviter bilobum. Fructus deest.

"Upper Burma:—Valley of Naung-chaung. Alt. 6000-7000 ft. In forest or open but sheltered places. Undershrub on moss-clad tree trunks and rocks. Flowers violet. August 1914." F. K. Ward. No. 1895.

**Peristrophe yunnanensis**, W. W. Sm. Sp. nov.

Species affinis *P. speciosae*, Nees a qua bracteis valde diversis, floribus dimidio minoribus inter alia recedit; quoad bracteas species haec potius ad *P. bicalyculatam*, Nees spectat.

Planta 1-2 m. alta habitu *P. speciosae*, Nees. Caules sulcati flexuosi graciles substraminei glabri, juveniles minutissime cinereo-pubescentes. Folia (superiora minora tantum visa) 2.5-3 cm. longa, circ. 1 cm. lata, lanceolata vel ovata, petiolo 1-3 mm. longo minutissime pubescente praedita, apice longiuscule acuminata, basi plerumque cuneata, integra, in sicco tenuiter membranacea, supra sparsim puberula (ad costam densius) ultimum glabrescentia, infra ad costam nervosque primo dense pubescentia. Inflorescentia ampla cymis laxepaniculatis; cymulae ultimae bracteis 3 mm. longis linearibus basi praeditae; bracteae florales plerumque 4, lineari-lanceolatae, acutissimae, 6-7 mm. longae, extra dense cinereo-pubescentes, margine plus minusve scariosae; bracteolae 2 bracteis subsimiles 5-6 mm. longae; flores in quoque capitulo bractearum plerumque solitarii. Calyx 5-6 mm. longus fere ad imum in lobos 5 lineares acutos fissus glaber vel subglaber. Corolla circ. 1.8 cm. longa roseo-lavendulacea extra minute pubescens. Stamina 2 filamentis supra glabris infra pube-

scentibus, antheris recurvis, polline typico. Stylus gracillimus. Semina matura desunt.

"China:—Yangpi Valley, Yunnan. Lat. 25° 40' N. Alt. 5000 ft. Shrub of 3-6 ft. Flowers rose-lavender. Shady open situations. April 1914." G. Forrest. No. 12,279.

**Phacellaria ferruginea**, W. W. Sm. Sp. nov.

Species valde affinis *Phacellariae Wattii*, Hook. f. a qua ramulis inflorescentiisque ferrugineo-tomentellis divergit.

Frutex parasiticus aphyllus ramosus caulibus aggregatis 15-30 cm. longis infra sparsim puberulis, supra ad regionem inflorescentiarum et ad ramulos juveniles dense ferrugineo-tomentelli. Flores minuti aggregati in foveolas inserti sessiles; aggregationes cuique ramulo ad 12 ferrugineo-tomentellae; perianthium floris masculini 5-merum 1 mm. diametro paulo superans, extra tenuiter tomentellum lobis deltoideis. Fructus anguste ovoideus circ. 5 mm. longus, lobis perianthii 5-6 deltoideis coronatus.

"China:—Tali Range, Yunnan. Lat. 25° 40' N. Alt. 9000-10,000 ft. Parasitic shrub of 6-12 inches. In mixed forests. Sept. 1913." G. Forrest. No. 11,585.

"Neighbourhood of Teng-yueh, Yunnan; growing on *Loranthus*." E. B. Howell. No. 325.

**Phytolacca clavigera**, W. W. Sm. Sp. nov.

Species affinis *Ph. polyandrae*, Batal. mihi non visae et *Ph. americanae*, Linn.; pedicellis flores aequantibus, tepalis ovatis circ. 4 mm. longis, staminibus 12, fructibus racemum densissimum claviformem formantibus inter alia bene notata.

Suffrutex ramosus 1-1.5 m. altus ramis suberectis robustis herbaceis glabris viridibus tandem purpurascensibus. Folia petiolo 1.5-2.5 cm. longo robusto vix canaliculato glabro suffulta; lamina plerumque ± 15 cm. longa, ± 8 cm. lata, ovato-elliptica vel ovato-lanceolata, apice acuta mucronato-glandulosa, basi cuneata in petiolum decurrens, margine paulo undulata, zona marginali pellucida angustissima praedita, membranacea, supra glabra, ad costam minute pulverulenta, infra glabra nisi ad costam nervosque minute scabridulos, punctulis albidis dense praedita, costa nervisque subtus prominentibus. Inflorescentiae foliis breviores, erectae dense racemosae pedunculis ± 3 cm. longis validis minute et scabridule puberulis suffultae; pedicelli circ. 4 mm. longi in fructu ad 7 mm. aucti, minute scabriduli, bracteis bracteolisque linearibus praediti; perianthii segmenta ovata, circ. 4 mm. longa, circ. 3 mm. lata, apice rotundata, per anthesin alba, tandem purpurascens; stamina

12 perianthium fere aequantia filamentis basi complanatis; ovarium 8-carpellatum, carpellis omnino connatis, stylis fere rectis ovaria subaequantibus. Fructus baccatus valde depressus circ. 9-10 mm. diametro niger; inflorescentia fructifera ad 15 cm. longa, circ. 4 cm. lata, fructibus in massam spiciformem coarctatis.

China:—Province of Yunnan. Cultivated in the Royal Botanic Garden, Edinburgh, from seeds collected by George Forrest. At present the plant is 3-4 ft high, and has flowered and fruited freely. The ripe inflorescence is very striking, the black fruits being packed into a dense club-shaped mass suggesting the ripe inflorescence of *Arisaema* and other Aroids. Forrest, No. 96, from the Kari Pass, Yunnan, previously ascribed to *Phytolacca acinosa*, Roxb., is perhaps the same, but the specimens are somewhat incomplete.

**Rhynchanthus Beesianus**, W. W. Sm. Sp. nov.

Species chinensis affinis *Rh. longifloro*, Hook. f. a quo spica circ. 12-flora, bracteis laete scarlatinis, corolla laete flava inter alia divergit.

Planta in scheda circ. 50 cm. alta, ex collectore saepe 60-90 cm., erecta, basi tuberoso-incrassata radicibus crassis tomentos. Folia 8-10, disticha, superiora bene evoluta, inferiora ad vaginas reducta; foliorum superiorum lamina plerumque 15-18 cm. longa, 5-7 cm. lata, oblongo-lanceolata, apice longe acuminata, basi rotundata vel late cuneata, membranacea, utrinque glabra, petiolo brevissimo atque vagina praelonga caulem arcte amplectante purpureo-striata auriculis brevibus rotundatis praedita; folia inferiora vaginiformia tenuiter membranacea margine brunneo-scariosa, medio purpureo-striata. Spica terminalis erecta circ. 12-flora breviter pedunculata; flores circ. 9 cm. longi. Bractea circ. 5 cm. longa, fere 1 cm. lata, lineari-lanceolata, acuta, tenuiter membranacea, laete scarlatina; bracteola subsimilis sed multo minor 1.5 cm. vix excedens. Calyx circ. 3 cm. longus, tubulosus, supra unilateraliter fissus, apice plerumque acuminibus duobus ornatus, scarlatinus. Corolla 5-6 cm. longa, laete flava; tubus elongatus supra dilatatus; lobi circ. 1.5 cm. longi, ovato-lanceolati, acuminati; labellum obsoletum. Filamentum longe exsertum, cymbiforme, flavum; anthera circ. 8 mm. longa. Ovarium circ. 5 mm. longum glabrum triloculare multiovulatum glandulis duabus oblongis coronatum; stylus gracillimus stigmatem infundibuliformi ultra antheram paululo exserto.

"China:—Province of Yunnan; on lava bed west of Tengyueh. Lat. 25° N. Alt. 5000 ft. Plant of 2-3 ft. Perianth bright canary yellow, bracts bright scarlet. Open

shady situations amongst scrub and grass. June 1912." G. Forrest. No. 8108.

This is an interesting extension into China of this rare genus. Two species were previously known, both believed to come from Burma. Their exact habitats are unknown. The present plant is much the finest of the three. The flowers of this genus show great reduction in the size of the labellum and the absence of staminodes.

**Strobilanthes arenicolus**, W. W. Sm. Sp. nov.

Species affinis *S. isophyllo*, T. Anders. a quo sepalis dense glanduloso-pilosis, corolla longiore, staminibus supra glabris, stylo glabro, capsula plus minusve pilosula differt.

Fruticulus 30-45 cm. altus basi decumbens supra ascendens vel suberectus; caulis inferior simplex cinerascens defoliatus umbricolus, superior ramosus quadrangulus satis bene foliatus primo minute puberulus mox glabrescens. Folia petiolo 1-3 mm. longo mox glabro praedita; lamina 3-5 cm. longa, 5-9 mm. lata, lineari-lanceolata, apice acuta vel subacuminata, basi cuneata, margine subremote serrulata, in sicco papyracea, supra atroviridis glabra crebro lineolata, infra pallidior primo sparsim pilosula cito glabrescens nervis circ. 5 paribus. Inflorescentiae ut in *S. isophyllo*; flores 1-3-nati, in axillis quasi brevi-pedunculati vel ramulos longiusculos terminantes foliis reductis ramulorum caducis; bracteae lineari-oblongae circ. 4 mm. longae glabrae caducae; bracteolae similes breviores. Calyx circ. 8 mm. longus glanduloso-hirsutus in lobos 5 lineari-oblongos acutiusculos fere ad basim partitus. Corolla 3-3.5 cm. longa, violacea, parte cylindrica partem ventricosam fere aequante, extra primo minute puberula cito subglabra, intus sparsim albo-villosa; lobi breves rotundati. Stamina 4, filamentis supra glabris basi sparsim pilosulis. Ovarium pilosulum; stylus glaber; fructus circ. 1 cm. longus sparsim pilosulus.

"Upper Burma:—Bed of Malihka, Insop. Alt. 600-1000 ft. Small shrubby plant of 1-1½ ft., decumbent, in dry sand, under the shrub growth on slaty rock, in shade of shrubs and bushes. Flowers rich violet. December 1914." F. Kingdon Ward. No. 2000.

"Kachin Hills, north of Myitkyina, on road to Kanpti Long via Malihka branch." S. Toppin. No. 4108.

**Strobilanthes Austini**, Clarke Mss. in Herb. Kew descr. W. W. Sm.

Species ex affinitate *S. Hancocki*, Clarke a quo petiolis longioribus, bracteis diversis, spicis laxioribus paucifloris inter alia recedit.



Planta circ. 30 cm. longa suberecta basi plus minusve decumbens caulibus flexuosis gracilibus crispato-pilosulis tarde glabrescentibus. Folia aequalia vel subaequalia petiolo 1.5-2 cm. longo dense fulvido-pilosulo praedita; lamina 6-7 cm. longa, 3-4 cm. lata, elliptica vel ovata vel obovata, apice subacuta vel acuta vel breviter acuminata, basi late cuneata vel etiam subrotundata, margine serrulata, in sicco papyracea, utrinque lineolata, supra atroviridis glabra vel sparsim setosula, infra glabra vel ad costam pilosula vel hic illic setosula; nervi 4-6 paria. Inflorescentiae plerumque terminales 2-4 cm. longae spiciformes; in axillis superioribus additi flores sessiles solitarii; ad basim spicae apparent folia reducta oblonga vel caulinis subsimilia; bractee circ. 1.5 cm. longae oblongae vel oblongo-spathulatae foliaceae deciduae lineolatae margine ciliatae vel pilosulae. Calyx 8-10 mm. longus in lobos 5 lineari-oblongos acutos margine ciliatos fere ad imum fissus. Corolla circ. 4 cm. longa paulo curvata purpurea; tubus usque ad medium cylindricus supra sensim ampliatus extra pilosulus; lobi rotundati 5-6 mm. diametro. Stamina perfecta 4 filamentis albo-pilosulis, polline typico. Fructus deest.

"China:—Mengtze, Yunnan. Woods in shade at 4500 ft. 1-1½ ft. With purple flowers." Henry. No. 9159A in Herb. Kew.

"Mi-lê, Yunnan; mountain forest. Purple flowers." Henry. No. 9956 in Herb. Kew.

"Yuanchay, Yunnan. 5000 ft. Purplish flowers." Henry. No. 13,382 in Herb. Kew.

**Strobilanthes claviculatus**, Clarke Mss. in Herb. Kew. descr. W. W. Sm.

Species affinis *S. alato*, Nees et *S. extenso*, Nees ob inflorescentiam esse videtur sed fortasse in *Alternifloras*, Clarke prope *S. rubescentem*, T. Anders. melius posita.

Planta 70 cm. alta vel ultra erecta ramosa caulibus gracillimis flexuosis glabris. Folia aequalia vel valde inaequalia, suprema sessilia, inferiora et mediana plerumque petiolo 5-10 mm. longo anguste alato minute puberulo suffulta; nonnunquam unum (majus) petiolatum, alterum sessile; lamina ad 7 cm. longa, ad 2 cm. lata, ovato-lanceolata vel lanceolata, apice acuminata, basi cuneata, margine remotiuscule serrulata, in sicco membranacea, utrinque lineolata, supra setulis minimis conspersa ceterum glabra, infra glabra vel subglabra; nervi utrinque circ. 5; folia sessilia cordata vel cordato-ovata. Inflorescentiae terminales et axillares 1-3-florae rhachi ad 5 cm. longa dense glanduloso-hirsutula praeditae; bractee cito deciduae; flores sessiles sub fructu remoti. Calyx ad 2 cm.

longus glanduloso-hirsutus in lobos 5 lineari-oblongos apice spathulatos ad imum fissus. Corolla fere 4 cm. longa leviter curvata pallido-purpurea (?); tubus basi cylindricus, mox subventricosus-amplius glaber; lobi rotundati circ. 5 mm. diametro. Stamina perfecta 4 filamentis glabris, polline typico. Fructus calycem aequans clavato-oblongus apice villosulus seminibus 4 sericeis circ. 3 mm. diametro.

"China:—Mi-lê district, Yunnan; in mountain wood. Purple flowers." Henry. No. 10,319 in Herb. Kew.

**Strobilanthes Cyclus**, Clarke Mss. in Herb. Kew. descr. W. W. Sm.

Species ex affinitate *S. yunnanensis*, Diels a quo foliorum forma atque inflorescentiis subverticillatis inter alia differt.

Planta circ. 40 cm. alta; radix crassa; caules plures erecti vel suberecti saepe flexuosi pilis longis articulatis fulvidis vel albidis plus minusve dense induti. Folia aequalia petiolo 2-5 mm. longo dense piloso praedita; lamina 2.5-5.5 cm. longa, 2-4.5 cm. lata, late ovata vel rhomboidea vel fere orbiculata, apice rotundata vel obtusa, basi late cuneata vel subrotundata, margine crenata nonnunquam obscure, in sicco papyracea, supra opaco-viridis subdense setoso-pilosa minute lineolata, infra pallidior praesertim ad costam nervosque (4-5 paria) setoso-pilosa. Inflorescentiae terminales et axillares sub-capitatae vel breviter spiciformes quasi-verticillatim dispositae, basi foliis reductis bene cinctae et suboccultae; flores ex collectore coerulei; bractee bracteolaeque lineari-oblongae circ. 8-10 mm. longae pilosae. Calyx circ. 7 mm. longus in lobos lineari-oblongos pilosos ad imum fissus. Corolla 2 cm. paulo superans fere recta; tubus basi breviter cylindricus, mox (sed sensim) amplius, extra glaber nisi prope lobos; corolla inaperta fronte longiuscule albo-pilosula; lobi subrotundati circ. 5 mm. diametro dorso albo-pilosi. Stamina perfecta 4 filamentis glabris polline typico. Ovarium apice pilosulum. Fructus circ. 7 mm. longus pilis apice persistentibus.

"China:—Yunnan; Mengtze, grassy mountain at 7000 ft. Growing in clumps. Blue flowers." Henry. No. 10,159 in Herb. Kew. et Herb. Edin.

Vicinity of Yunnan-sen. Maire. Nos. 730, 1878 in Herb. Edin.

**Strobilanthes fimbriatus**, Nees var. **majusculus**, W. W. Sm.

Var. nov.

A typo foliis duplo majoribus circ. 12-nerviis subtus vix vel obscure lineolatis ad costam nervosque sparsim puberulis, corolla ad 5 cm. longa differt.

"Upper Burma:—Kachin Hills, north of Myitkyina, on road to Kanpti Long via Malihka branch." Toppin. Nos. 4183, 4244.

This is so near the Khasian plant that I have not given it more than varietal rank.

**Strobilanthes Hancocki**, Clarke Mss. in Herb. Kew. descr. W. W. Sm.

Species ex affinitate *S. pentstemonoidis*, T. Anders. a quo foliis chartaceis, inflorescentiis strobiliformibus inter alia recedit.

Planta 30–40 cm. alta erecta caulibus flexuosis gracilibus teretibus glabris vel cito glabrescentibus. Folia superiora sessilia vel fere sessilia, mediana petiolo 3–5 mm. longo sparsim pilosulo suffulta; lamina plerumque 6–9 cm. longa, 2–4 cm. lata, ovata vel ovato-lanceolata, apice acuminata, basi plus minusve late cuneata, margine crenato-serrata, in sicco chartacea, utrinque lineolata, supra atroviridis ad costam marginesque pilosula ceterum glabra, infra pallidior glabra; nervi 5–7 paria. Inflorescentiae ramulos terminantes strobiliformes; aggregatio bractearum circ. 4 cm. longa; bractee circ. 1.5 cm. longae, ellipticae vel ovatae, sub anthesin plus minusve persistentes, lineolatae, subglabrae. Calyx ad 1.5 cm. longus in lobos 5 lineari-oblongos acutos lineolatos ad margines sparsim pilosulos fere ad imum fissus. Corolla 4–5 cm. longa, plus minusve curvata, purpurea; tubus basi cylindricus, supra sensim ampliatus extra glaber, intus hic illic prope fauces longiuscule albo-villosus; lobi rotundati 5–6 mm. diametro. Stamina perfecta 4 filamentis albo-villosulis polline typico. Fructus immaturus apice albo-villosulus.

"China:—Mengtsh mountains, Yunnan. Rocky places. Flowers blue. Sept. 1893." Hancock. No. 104 in Herb. Kew.

"Mengtsh, grass mountains. 6000 ft. Purple flowers." Henry. No. 10,027 in Herb. Kew. et Edin.

"Mengtsh, south mountains. 3000 ft. Purple flowers." Henry. No. 10,027A in Herb. Edin.

**Strobilanthes hupehensis**, W. W. Sm. Sp. nov.

Species affinis *S. pentstemonoides*, T. Anders. a quo foliis vix glabris, bracteis longe ante anthesin delapsis, calyce pilis longis patentibus paleaceis glanduloso-capitatis dense obsito inter alia divergit.

Planta 40–60 cm. alta ut videtur, erecta, caulibus flexuosis gracilibus angulatis glabris. Folia petiolo circ. 1 cm. longo glabro lineolato suffulta; lamina 9–14 cm. longa, 2.5–4 cm.

lata, lanceolata vel elliptico-lanceolata, apice longe (saepe praelonge) acuminata, basi cuneata, margine argute atque subregulariter serrata, in sicco membranacea, supra atroviridis setulis paleaceis nitentibus hic illic conspersa ceterum glabra minute lineolata, infra pallidior glabra obscure vel vix lineolata; nervi 5-8 paria. Inflorescentiae in axillis superioribus orientes pedunculis gracilibus ad 5 cm. longis glabris simplicibus vel pauciramosis folia reducta pauca gerentibus suffultae; flores capitati plerumque 3-5-nati; bractee ante anthesin deciduae non visae. Calyx 5-8 mm. longus setulis patentibus paleacis nitentibus glanduloso-capitatis dense indutus in lobos 5 inaequales lineari-oblongos obtusiusculos fere ad imum fissus. Corolla circ. 3 cm. longa, fere recta, ut videtur pallido-purpurea, extra sparsim pilosula, intus glabra nisi ad fauces sparsim albivillosulas; tubus infra cylindricus, supra sensim ampliatus, lobis brevibus rotundatis. Stamina perfecta 4 filamentis glabris. Ovarium pilosulum. Fructus 1 cm. longus vel ultra, quoad formam ei *S. pentstemonoidis* subsimilis.

"China:—West Hupeh. July 1901. Wilson. No. 2627."

This appears to be the Hupeh representative of the widespread and variable *S. pentstemonoides*, T. And. It is not conspecific with the plant collected in Nepal by Wallich. Central China sheets such as Henry, Nos. 2074 and 3052, are referable to *S. hupehensis*.

***Strobilanthes hygrophiloides***, Clarke Mss. in Herb. Kew. descr. W. W. Sm.

Species affinis *S. fimbriatae*, Nees; foliis utrinque setulis conspersis, floribus in axillis superioribus quasi-verticillatis bene notata.

Planta erecta caulibus flexuosis dense albido- vel fulvido-hirsutis tarde glabrescentibus; altitudo non nota; rami in scheda circ. 30 cm. longi. Folia petiolo 1-2 cm. longo plus minusve alato hirsuto praedita; lamina plerumque 5-7 cm. longa, 2.5-3.5 cm. lata, nonnunquam ad 10 cm. longa, ad 5 cm. lata, elliptica vel ovata vel ovato-lanceolata, apice acuminata, basi late vel anguste cuneata, margine obscure et irregulariter serrata, tantum in foliis maximis serrata, in sicco chartacea, utrinque lineolata, supra atroviridis setulis conspersa, ad costam saepe densius, infra pallidior densiuscule setosula; nervi 5-7 paria. Inflorescentiae in axillis superioribus orientes; flores 1-3-nati, quasi-verticillati; pedunculi pedicellique nulli; bractee bracteolaeque lineari-oblongae calycem aequantes vel paulo superantes plus minusve hirsutae. Calyx circ. 1.5 cm. longus pilis articulatis hirsutulus in lobos 5 lineari-lanceolatos acutos fere ad imum fissus. Corolla 3.5-4 cm. longa, fere recta,

pallido-purpurea (?); tubus basi cylindricus mox et subito ventricosus-ampliat, extra sparsim pilosulus, intus apud fauces hic illic albo-villosulus; lobi rotundati 7-8 mm. diametro. Stamina perfecta 4 filamentis albo-villosulis polline typico. Ovarium albo-villosulum seminibus 4; stylus pilosulus.

"China:—Ta-tsien-lou (Principauté de Kiala), Thibet Oriental. Anno 1893. Soulié. No. 591 in Herb. Kew."

Between Batang and Tachienlu. Sept.-Oct. 1904. Consul General Hosie sine num. in Herb. Kew.

**Strobilanthes Lamium**, Clarke Mss. in Herb. Kew. descr. W. W. Sm.

Species affinis *S. versicolori*, Diels et *S. yunnanensi*, Diels; ab illo habitu humiliore, caulibus simplicibus, foliorum forma, inflorescentiis congestis, filamentis glabris inter alia recedit; ab hoc caulibus simplicibus herbaceis, foliis glabrioribus magis incisus recognoscitur.

Planta ad 45 cm. alta suberecta basi saepe plus minusve decumbens; caules flexuosi supra pilis paleaceis saepe glanduloso-capitatis albidis dense induti, infra glabrescentes. Folia infra remota supra approximata, aequalia, petiolo circ. 1 cm. longo glanduloso-hirsuto tandem glabrescente suffulta; lamina plerumque 4-5 cm. longa, 2.5-3 cm. lata, ovata vel ovato-lanceolata, apice acuta vel acuminata, basi late cuneata, margine (pro magnitudine grosse) serrata, in sicco papyracea, utrinque lineolata, supra atroviridis, sparsim setosula ad costam fulvidopilosula, subtus multo pallidior ubique subsparsim pilosula vel setosula; nervi circ. 5 paria; folia suprema fere sessilia congesta saepe lanceolata basim inflorescentiae amplectantia et suboccludentia. Inflorescentiae terminales breviter spiciformes 4-8-florae; flores sessiles purpurei; bracteae circ. 16 mm. longae, oblongae vel oblanceolatae (cum bracteolis circ. 12 mm. longis lineari-oblongis), pilis glanduloso-capitatis indutae. Calyx circ. 1.1 cm. longus in lobos lineares 5 lineari-oblongos glanduloso-pilosos ad inum fissus. Corolla circ. 3.5 cm. longa fere recta extra sparsim glanduloso-pilosula; tubus basi cylindricus mox sensim ampliat; lobi rotundati circ. 6 mm. diametro. Stamina perfecta 4 (Clarke teste nonnunquam 3) filamentis dense pilosulis polline typico. Ovarium apice pilosulum; fructus maturus deest.

"China:—W. Hupeh near Chienshi. Flowers purple. July 1900." Wilson. No. 1300 in Herb. Kew. et Herb. Edin.

**Strobilanthes mekongensis**, W. W. Sm. Sp. nov.

Species affinis *S. yunnanensi*, Diels a quo foliis longe petiolatis tenuiter membranaceis, calycis segmentis longe et

molliter albo-villosis inter alia divergit; in sectionem *Alterniflorarum*, Clarke ponenda.

Frutex 2-2.5 m. altus erectus ramosus ramis junioribus plus minusve albido-pilosulis, senioribus glabris pallido-cinerascentibus. Folia petiolo 2-4 cm. longo albido-pilosulo suffulta; lamina 6-9 cm. longa, 2.5-4.5 cm. lata, ovato-lanceolata vel ovata vel subelliptica, apice longiuscule acuminata, basi cuneata in petiolum decurrens, margine remotiuscule serrata vel undulata vel subintegra, ciliolata, in sicco tenuiter membranacea, supra atroviridis pilis paleaceis hic illic conspersa subdense lineolata, infra multo pallidior ad nervos (4-5 paria) sparsim paleaceopilosula lineolata. Flores remoti ex axillis superioribus orientes, duo oppositi sed saepius unus evolutus alter vestigialis; pedunculus circ. 4 mm. longus albido-pilosulus (saepe brevissimus fere obsoletus), apice bracteolam circ. 2 cm. longam lineari-oblongam vel lineari-oblancoalam ceterum foliis subsimilem gerens. Calyx 1.5-2 cm. longus in lobos 5 lineari-oblongos acutos dense albo-villosos praesertim ad margines ad basim partitus. Corolla 4-5 cm. longa, fere recta, basi cylindrica, supra anguste tubulosa sensim ampliata ad os (circ. 2 cm. latum in sicco complanatum), extra subdense albo-villosula, flavido-alba, roseo-suffusa, lobis rotundatis circ. 6 mm. diametro. Stamina 4; filamenta longiora plus minusve albo-villosa; pollen generis. Ovarium dense albo-villosum breviter stipitatum; stylus sparsim albo-villosulus. Fructus immaturus seminibus 4.

"China:—Mekong Valley, Yunnan. Lat. 27° 40' N. Alt. 6000 ft. Open rocky situations. Shrub of 6-8 ft. Flowers yellowish-white flushed rose. July 1914." G. Forrest. No. 12,882.

***Strobilanthes oresbius*, W. W. Sm. Sp. nov.**

Species affinis *S. inflato*, T. Anders. a quo foliis majoribus latissimis subglabris margine grossidentatis inter alia facile recognoscitur.

Fruticulus caules annuos erectos circ. 1 m. altos quadrangulos glabros vel glabrescentes emittens. Folia petiolo 2-8 cm. longo supra alato glabro suffulta; lamina foliorum superiorum ad 17 cm. longa, ad 11 cm. lata, ovata, apice longiuscule acuminata, basi cuneata in petiolum decurrens, margine grosse serrata, in sicco membranacea, supra opaco-viridis, glabra nisi ad costam obscure puberulam, sparsim lineolata, infra glabra brunneo-olivacea, nervis utrinque circ. 10 subconspicuis. Inflorescentiae in axillis superioribus ortae spiciformes tortuosae 6-12-florae pilis glanduloso-capitatis dense obsitae pedunculo circ. 2.5 cm. longo suffultae; flores 1-2-nati, sessiles vel subsessiles; bractee

5-6 mm. longae lineari-oblongae vel anguste spathulatae plus minusve glanduloso-pilosae. Calyx 12-13 mm. longus pilis glanduloso-capitatis dense obsitus in lobos lineari-oblongos fere ad basim partitus. Corolla ad 4 cm. longa medio magnopere curvata, extra albo-pilosa (tandem sparsim), pallido-purpurea; tubo circ. 3.5 cm. longo, parte infima 5 mm. longa cylindrica, parte mediana valde ventricosa circ. 1.5 cm. longa et lata, parte suprema circ. 1.5 cm. longa supra ampliata, lobis brevibus orbicularibus. Stamina 4 ad curvaturam medianam attingentia. Stylus minute puberulus vel glabrescens. Ovarium glabrum.

"Upper Burma:—Mountains above Laking-hka, 11,000-12,000 ft., valley of Naw-chaung. In open meadows by streams or undergrowth by streams. Perennial undershrub sending up annual stems of 3-4 ft. Flowers palest purple, almost mauve. August 1914." F. Kingdon Ward. No. 1911.

**Strobilanthes pinetorum**, W. W. Sm. Sp. nov.

Species ex affinitate *S. rubescentis*, T. Anders.; foliis inferioribus serratis longe petiolatis (petiolis alatis) superioribus sessilibus, duobus supremis quasi-involucrantibus flore primo plus minusve incluso longioribus inter alia bene notata.

Fruticulus ad 1 m. altus erectus ramosus bene foliatus glaber vel cito glabrescens. Folia mediana et inferiora petiolo 1-3 cm. longo alato glabro suffulta; lamina ad 9.5 cm. longa, ad 5 cm. lata, ovata, apice plerumque caudato-acuminata, basi subrotundata vel late cuneata in petiolum subabrupte decurrens, margine regulariter et mediocriter serrata, in sicco membranacea, supra atroviridis primo sparsim pilosula mox glabra, infra olivacea glabra, utrinque lineolata, nervis 5-6 paribus; superiora sessilia basi rotundata subcordata, ceterum inferioribus similia. Flores remoti subspiciformiter dispositi ramulos terminantes; par supremum foliorum caulinarum plerumque ramulos tres (duos axillares) vel ramulos duos floremque solitarium sessilem includit; hi ramuli folia multo reducta sessilia gerunt et ad ultimum cum ramulis secundariis suis flore solitario sunt terminati; bractee 5-7 mm. longae oppositae ovatae basim floris cingentes. Calyx circ. 1 cm. longus glaber lineolatus in lobos 5 lineari-oblongos obtusiusculos fere ad basim partitus. Corolla circ. 4 cm. longa valde curvata extra glabra pallido-purpurea, parte ventricosa partem cylindricam duplo superante, lobis brevibus rotundatis. (Flos bene evolutus in scheda nostra unicus quare genitalia indescripta manent.)

"China:—Hills to the south of Teng-yueh, Yunnan. Lat. 25° N. Alt. 6000 ft. Shady situation in pine forests. Half-shrubby plant of 2-3 ft. Flowers light bluish-purple. June 1912." G. Forrest. No. 8385.

**Strobilanthes polyneuros**, Clarke Mss. in Herb. Kew. descr.  
W. W. Sm.

Species distinctissima ex affinitate *S. fimbriatae*, Nees; foliis magnis multi-nervatis inter alia bene notata.

Planta ad 1.8 m. alta; caulis (pars minima visa) lignescens crassus. Folia superiora tantum visa sessilia vel petiolo brevissimo crasso praedita; lamina 13-30 cm. longa, 5-11 cm. lata, elliptica vel late lanceolata, apice longiuscule acuminata, basi cuneata, margine subregulariter serrulata, in sicco papyracea, utrinque lineolata atque glabra, supra atroviridis infra brunneo-olivacea; nervi 12-20 paria utrinque plus minusve conspicui subparalleli. Flores in spicas axillares congestas brevi-pedunculatas bene bracteatas circ. 4 cm. longas dispositi; pedunculus circ. 1 cm. longus; bracteae steriles circ. 1 cm. longae foliaceae ovatae basim spicae amplectentes; bracteae fertiles et bracteolae 2-2.4 cm. longae basi lanceolatae supra longissime subulato-acuminatae apice ipso saepe inflexae minute fulvido-pilosulae. Calyx circ. 17 mm. longus in lobos 5 lineares apice longe subulatos fissus. Corolla circ. 4 cm. longa fere recta purpurea; tubus basi cylindricus mox sensim ampliatus extra glaber intus sparsim puberulus, lobis rotundatis circ. 6 mm. diametro. Stamina perfecta 4 filamentis hirsutulis. Ovarium apice villosulum stylo dense patenti-villoso. Fructus deest.

"China:—Mengtsz, Yunnan; south mountains. Alt. 5000 ft. Shrub 6 ft. Purplish flowers." Henry. No. 10,352 in Herb. Kew.

**Strobilanthes psilostachys**, Clarke Mss. in Herb. Kew. descr.  
W. W. Sm.

Species ex affinitate *S. pentstemonoidis*, T. Anders. a quo caulibus petiolisque hirsutulis, foliis inaequalibus, inter alia recognoscitur.

Planta 25-60 cm. alta erecta vel basi decumbens caulibus tortuosis vel flexuosis gracilibus plus minusve dense fulvido-hirsutulis. Folia petiolo 3-10 mm. longo fulvido-hirsutulo praedita; paria valde inaequalia; lamina majorum 6-9 cm. longa, 2.5-3.5 cm. lata, ovata vel elliptico-ovata vel lanceolata, apice caudato-acuminata, basi plus minusve late cuneata, margine irregulariter serrata, in sicco chartacea, utrinque lineolata, supra setulis paleaceis paucis conspersa, utrinque ad costam nervosque minute fulvido-pilosula, nervis 5-6 paribus; folia minora 1-2 cm. longa. Inflorescentiae terminales et in axillis superioribus orientes, pedunculis circ. 2.5 cm. longis hirsutulis suffultae; flores capitati, plerumque 3-nati; bracteae cymbiformes lineolatae cito deciduae. Calyx 5-8 mm. longus



dense glanduloso-hirsutus in lobos 5 inaequales lineari-oblongos obtusos fere ad imum fissus. Corolla ad 4 cm. longa fere recta pallido-purpurea; tubus basi cylindricus supra sensim ampliatus extra glaber, intus nisi ad unum locum apud fauces villosulum glaber; lobi rotundati 5-6 mm. diametro. Stamina perfecta 4 filamentis glabris, polline typico. Fructus ad 1 cm. longus oblongo-clavatus glanduloso-pilosulus.

"China:—Szemao forests, Yunnan. 4500 ft. Flowers pale purple." Henry. No. 12,914 in Herb. Kew. and Herb. Edin.

***Strobilanthes rufo-hirtus***, Clarke Mss. in Herb. Kew. descr. W. W. Sm.

Species affinis *S. yunnanensis*, Diels; pilis rufis caules petiolos folia bracteas ornantibus bene notata.

Planta in scheda 20-30 cm. longa erecta gracilis; forsan ad 1 m. alta; caules supra pilis rufis longis articulatis bene praediti infra glabrescentes. Folia petiolo 1.5-2.5 cm. longo dense rufo-hirto suffulta; lamina 8-9 cm. longa, 3.5-4 cm. lata, ovata vel ovato-lanceolata, apice acuminata, basi late cuneata vel subrotundata, margine crenata rufo-ciliata, in sicco membranacea, supra atroviridis setulis rufidis articulatis conspersa, infra setulis iisdem paulo densius praedita; nervi circ. 5 paria. Inflorescentiae terminales 2-3-florae una cum bracteis lineari-spathulatis dense rufo-hirtae; pedunculus pedicellique obsoleti. Calyx 12-13 mm. longus rufo-hirtus in lobos lineari-spathulatos fere ad imum fissus. Corolla 4-5 cm. longa; tubus infra cylindricus supra sensim ampliatus, parte cylindrica partem alteram subaequante, extus minute puberulus, intus hic illic albovillosulus; lobi rotundati circ. 6-7 mm. diametro. Stamina perfecta 4, filamentis albo-villosis polline typico. Fructus deest.

"China:—Mengtsz; S.E. mountain forests. 5000 ft. ["Shrub 3 ft., with pink flowers" ?]" Henry. No. 11,133 in Herb. Kew.

I have seen only one sheet of this very distinct *Strobilanthes*. The material is scanty, but the species is readily recognised by the abundance of rufous articulated hairs. The height and colour noted on the ticket are within inverted commas and perhaps on authority of native collector.

***Strobilanthes scoriarum***, W. W. Sm. Sp. nov.

Species ex affinitate *S. rhombifolii*, Clarke et *S. dasyspermi*, Kurz; foliis superioribus sessilibus basi rotundatis glabris, calycibus epilosis eglandulosis inter alia bene notata.

Planta 60-75 cm. alta erecta ramosa caulibus subquadratis sparsim pilosulis glabrescentibus. Folia superiora tantum visa sessilia vel subsessilia; lamina 10-15 cm. longa 4-6.5 cm. lata,

lanceolata vel ovato-lanceolata, apice longe acuminata, basi plus minusve rotundata vel late obtusa, margine regulariter serrata, in sicco membranacea, supra atroviridis crebre lineolata glabra, infra ad costam nervosque lineolata glabra; nervi 5-6 paria. Inflorescentiae amplae anguste paniculatae ad 25 cm. longae; rhachis cum ramis ramulisque plus minusve pilosula; pedicelli subobsoleti; bractee plerumque 5-10 mm. longae, foliaceae, ellipticae vel ovatae, obtusae, utrinque lineolatae, sub anthesi plus minusve persistentes. Calyx circ. 1 cm. longus epilosus eglandulosus utrinque lineolatus in lobos 5 lineari-lanceolatos acutos fere ad imum divisus. Corolla ad 3.5 cm. longa fere recta extra glabra saturate kermesino-purpurea, intus glabra (nisi ad unum locum apud fauces albo-villosum); tubus infra cylindricus supra subito ampliatus, parte ventricosa paulo longiore, lobis rotundatis circ. 6 mm. diametro. Stamina 4 filamentis glabris; pollen typicum. Ovarium fere glabrum apice tantum sparsim pilosulum stylo glabro. Fructus deest.

"China:—Lava bed west of Tengyueh, Yunnan. Lat. 25° N. Alt. 5000 ft. Open situations. Plant of 2-2½ ft. Flowers deep crimson-purple. August 1912." G. Forrest. No. 8862.

This species is very closely allied to *S. rhombifolius*, Clarke, an Assam plant with which has been identified by Clarke a Yunnan sheet collected by Henry under No. 11,183 at Feng Chen Lin. The Henryan plant differs from *S. scoriarum* in its very glandular calyx, but is otherwise very like. I doubt its identity with the Assam *S. rhombifolius*.

#### **Strobilanthes stramineus**, W. W. Sm. Sp. nov.

Species affinis *S. pentstemonoides*, T. Anders. a quo foliis chartaceis sessilibus rotundatis, floribus stramineis, staminibus brevioribus ad staminodia reductis inter alia recedit.

Planta suffruticosa caulibus elongatis decumbentibus flexuosis saepe supra frutices errantibus glabris vel cito glabrescentibus. Folia superiora tantum visa sessilia; lamina 8-11 cm. longa, 5-6.5 cm. lata, late ovata, apice acuta vel breviter acuminata, basi rotundata, margine crebro et regulariter serrulata, in sicco chartacea, atroviridis, utrinque lineolata glabra, nervis 6-7 paribus. Inflorescentiae pedunculis praelongis 12-18 cm. longis saepe in ramulos tres divisus glabris vel ad apicem sparsim pilosulis suffultae; bractee mox deciduae mihi non visae; flores plerumque 5-9-aggregati subcapitati sub fructu remotiusculi. Calyx circ. 1.2 cm. longus in lobos 5 lineari-lanceolatos minute et dense pilosulos fere ad imum partitus. Corolla circ. 3 cm. longa valde curvata extra glabra straminea purpureo-lineata, intus glabra nisi ad unum locum apud fauces albo-villosum, infra cylindrica, supra subito ventricosam-ampliata, lobis brevibus

rotundatis. Stamina perfecta duo filamentis glabris; staminodia duo. Ovarium minute albo-pilosulum. Fructus 1 cm. longus, oblongo-clavatus seminibus 4 ovalibus circ. 2 mm. longis sericeis.

"Upper Burma:—Forty miles south of Putao. 2000 ft. alt. Suffruticose herb, weak stems several feet in length, more or less decumbent and supported amongst the thick jungle growth on the edge of the jungle. Flowers straw-coloured, upper lip with purple guide streaks. December 1914." F. Kingdon Ward. No. 1986.

**Strobilanthes Wardii**, W. W. Sm. Sp. nov.

Species affinis *S. consorti*, Clarke a quo foliis et indumento et corollae forma differt.

Fruticulus ad 1.5 m. altus; caules flexuosi pilis articulatis fulvidis vel albidis plus minusve dense induti. Folia subaequalia vel valde inaequalia, majora petiolo 2.5–4.5 cm. longo dense articulato-piloso suffulta; lamina majorum plerumque 6–10 cm. longa, 4–6.5 cm. lata, ovata vel elliptico-ovata vel subelliptica, apice caudato-acuminata, basi plus minusve rotundata vel late cuneata, margine serrata, in sicco membranacea, supra atro-viridis lineolata ad costam fulvido-pilosula ceterum sparsim setosula, infra pallidior ubique plus minusve albido-setoso-pilosa; nervi 4–5 paria. Inflorescentiae floribus 2–6 compositae ramulos saepe tortuosos terminantes subcapitatae vel brevi-spiciformes congestae pilis longis albido-paleaceis dense indutae; flores ipsi sessiles saturate purpurei; bractee 5–15 mm. longae ovatae acuminatae foliaceae. Calyx circ. 1 cm. longus in lobos 5 lineari-oblongos dense paleaceo-pilosos apice tantum virides obtusiusculos fere ad imum fissus. Corolla 2.5–3 cm. longa valde curvata extra pilosula intus glabra; tubus basi breviter cylindricus supra ventricosus-ampliatius; lobi rotundati circ. 5 mm. diametro. Stamina perfecta 4 filamentis glabris. Ovarium glabrum. Fructus deest.

"Upper Burma:—Valley of Naw-chaung. Small shrub or bush of 3–5 ft. Flowers borne on new shoots each year. Amongst thick undergrowth in rather open parts of tree (not bamboo) forest. 9000–10,000 ft. Flowers richest purple. Aug. 1914." F. Kingdon Ward. No. 1912.

**Tanacetum elegantulum**, W. W. Sm. Sp. nov.

Species affinis *T. adenantho*, Diels a quo foliis pulchre dissecis utrinque argenteis, inflorescentiis laxioribus, capitulis in-canis divergit.

Planta 25–50 cm. alta e caudice parvo lignoso oriens; caules numerosi basi simplices graciles erecti vel suberecti tomento

tenui incano-argenteo induti, supra in regione inflorescentiae corymboso-ramosi. Folia caulina circ. 2 cm. longa, circ. 1.5 cm. lata, tenuiter tripinnatisecta, segmentis ultimis 2-3 mm. longis linearibus, utrinque incano-tomentella; folia superiora minus dissecta, suprema simplicia linearia ad 1 cm. longa. Inflorescentiae corymbosae diffusae pedunculis ultimis ad 1 cm. longis incanis; capitula vix matura 3-4 mm. diametro; involucri phylla exteriora 2-3 mm. longa linearia vel lanceolata incano-tomentella, interiora lanceolata vel elliptica extus plus minusve tomentella intus stramineo-scariosa. Flores vix maturi.

"China:—Mekong-Salween divide, Yunnan. Lat. 28° 10' N. Alt. 10,000 ft. Strongly aromatic shrubby plant of 9-20 inches. Flowers immature. Open stony pasture and on edges of cliffs. Sept. 1914." G. Forrest. No. 13,335.

"On the Tong Shan in the Yangtze bend, Yunnan. Lat. 27° 20' N. Alt. 10,000 ft. Aromatic shrubby plant of 12-20 inches. Flowers immature, probably yellow or brown. Open stony pasture. Sept. 1913." G. Forrest. No. 11,341.

This *Tanacetum* comes from the same area as *T. adenanthum*, Diels, and is closely allied to it.

***Tanacetum glabriusculum*, W. W. Sm. Sp. nov.**

Species ex affinitate *T. Pallasiani*, Trautv. et Mey. a quo foliis aliter sectis glabriusculis, corymbis contractis, capitulis pallidis recedit.

Planta ad 75 cm. alta e caudice lignoso oriens, infra pauciramosa; caulis sat robustus erectus primo tomento albedo tenui indutus tandem glabrescens. Folia caulina membranacea, plerumque 8-12 cm. longa, 2-5 cm. lata, ambitu obovata, in petiolum 2-3 cm. longum vix discretum alatum attenuata, bipinnatisecta, segmentis primariis plerumque 5 anguste obovatis cum rhachi alata conjunctis in segmenta secundaria 5-10 mm. longa 2-5 mm. lata lanceolata vel linearia apiculata 3-5-fidis, supra viridia glabra, infra pallidiora sparsim pilosa. Inflorescentiae corymbosae contractae 3-4 cm. diametro; pedunculi ultimi circ. 5 mm. longi tomento incano induti; capitula 6-7 mm. diametro; involucri phylla exteriora 2-3 mm. longa linearia vel elliptica extra plus minusve incana, interiora 3-4 mm. longa elliptica vel obovata, fere ex toto stramineo-scariosa, glabra vel fere glabra; flores numerosi circ. 3 mm. longi pallido-luteo-brunnei; achaenia matura desunt.

"China:—Yunnan; mountains in the N.E. of the Yangtze bend. Lat. 27° 45' N. Alt. 10,000 ft. Shrubby plant of 2-2½ ft. Flowers light-yellowish brown. Open stony pasture on the margins of pine forests. Sept. 1913." G. Forrest. No. 11,302.

"Yunnan, Mekong-Yangtze divide. Lat. 27° 40' N. Alt.

10,000 ft. Aromatic plant of 9-12 inches. Flowers white. Open stony pasture. Aug. 1914." G. Forrest. No. 13,418.

The latter specimen is dwarf but appears to be the same species.

**Tanacetum oresbium**, W. W. Sm. Sp. nov.

Species ex affinitate *T. myrianthi*, Franch. a quo habitu gracillimo, foliis minoribus in segmenta ultima minima divis, corymbis gracillimis pauci-capitulatis, capitulis ipsis minoribus inter alia recedit.

Planta 30-60 cm. alta e caudice lignoso oriens, prope basim multiramosa; caules graciles erecti vel suberecti, ramulis multis gracillimis 4-10 cm. longis praediti, tomento albedo tenui plus minusve induti. Folia caulina numerosa 5-15 mm. longa, breviter petiolata, bipinnatisecta in segmenta ultima 1-3 mm. longa linearia acutiuscula, supra viridia incano-pilosa, infra pilis densis incanis plus minusve argentea. Inflorescentiae corymbosae similes eis *T. fruticulosi*, Ledeb. et *T. gracilis*, Hook. f. et Thoms.; pedunculi ultimi 2-3 mm. longi; capitula circ. 2.5 mm. diametro; involucri phylla exteriora circ. 1 mm. longa lineari-lanceolata incano-tomentella, interiora circ. 2 mm. longa, elliptica, stramineo-scariosa, glabra vel fere glabra; achaenia matura desunt.

"China:—Yunnan, on the Bei Ma Shan. Lat. 28° 20' N. Alt. 12,000 ft. Strongly aromatic plant of 1-2 ft. Flowers dull golden yellow. Open situations amongst rocks. Oct. 1914." G. Forrest. No. 13,417.

This has the appearance of a very slender *T. myrianthum*, Franch. It bears a close resemblance in habit, leaves, and inflorescence to West Himalayan species, such as *T. fruticosum*, Ledeb. and *T. gracile*, Hook. f. et Thoms.

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ADDENDUM.

My thanks are due to the Director of Kew for the loan of Chinese material of *Strobilanthes*. These sheets had already been examined by the late C. B. Clarke, who affixed manuscript names to several of the species. These names I have adopted and have given descriptions. Some of these species are not represented in the Edinburgh Herbarium, and my further thanks are due for permission to include descriptions of these in the above series. I am thus enabled to publish the new species

of *Strobilanthes* together. The type-specimens of the following species, marked by an asterisk in the list on pages 167-168, are in the Kew Herbarium, and are unrepresented in the Edinburgh Herbarium :—

*Strobilanthes* Austini, Clarke Mss.

*S. claviculatus*, Clarke Mss.

*S. hygrophiloides*, Clarke Mss.

*S. polyneuros*, Clarke Mss.

*S. rufo-hirtus*, Clarke Mss.

W. W. S.